



JANICE LUCKMAN

NEPTUNIUM

Element Symbol: **Np**

Atomic Number: **93**

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Elizabeth College

Neptunium was discovered by Edwin McMillan and Philip Abelson in 1940, at the University of California's Berkeley Radiation Laboratory. It was named after the planet Neptune.

When Neptunium was first discovered scientists thought it was an entirely artificial or man made element. In 1942 very small amounts of the element were found in the Earth's crust.

It is present in extremely small quantities in Uranium ores and is created when a neutron that is emitted by one Uranium atom undergoing fission is captured in the nucleus of another Uranium atom.

Neptunium-239 is the only isotope to have practical uses. It is used in specialised detection devices and being fissionable could theoretically be used as fuel in a fast neutron reactor or a nuclear weapon.

Neptunium is a very hazardous material. The radiation it gives off can cause serious health problems for humans and animals. It must be handled with great caution.

Provided by the element sponsor Elizabeth College

ARTISTS DESCRIPTION

For this image I chose the more recognisable representation of Neptune the God of the Sea with his trident, rising from the depths with his flowing hair and beard. My technique here was to use a dental drill to draw the image into copper. This was printed as a black layer over a collograph of a textured blue background of the "foaming sea".

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